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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/553,530	04/20/2000	Hiroshi Maeda	09812.0516	5119

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER	
BONSHOCK, DENNIS G	

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/553,530	MAEDA ET AL.	
	Examiner	Art Unit	
	Dennis G. Bonshock	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,6-9 and 13-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2, 6-9, and 13-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

FINAL REJECTION

Response to Amendment

1. It is hereby acknowledged that the following papers have been received and placed on record in the file: Amendment as received on 2-09-2006.

2. Claims 2, 6-9, and 13-17 have been examined.

Status of Claims:

3. Claims 2, 6-9, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,212,643 to Yoshida, European Patent No. 0 378 271 to De Jong et al (hereinafter De Jong), U.S. Patent No. 6,011,494 to Watanabe et al. (hereinafter Watanabe), and U.S. Patent No. 6,236,912 B1 to Bomans et al (hereinafter Bomans).

4. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida, De Jong, Watanabe, Bomans, and U.S. Patent No. 6,012,014 to Koyanagi et al. (hereinafter Koyanagi).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 6-9, and 13-~~17~~ 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,212,643 to Yoshida, European Patent No. 0 378

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271 to De Jong et al (hereinafter De Jong), U.S. Patent No. 6,011,494 to Watanabe et al. (hereinafter Watanabe), and U.S. Patent No. 6,236,912 B1 to Bomans et al (hereinafter Bomans).

7. Referring to claims 2, and 9, Yoshida teaches a method and electronic map apparatus (vehicle-mounted navigation apparatus). The apparatus has a data fetching means for fetching map data from media for storing the map data to be displayed as a map. See col. 3, lines 22-30, which describes how the display control unit reads (fetches) the map data. Yoshida describes a display device (Fig. 1; 11) for displaying the map in accordance with the map data. The display control unit (microcomputer) processes the map data and scale indication patterns, which is an equidistant curve from a center at a specified point (location of the vehicle) on the map and links points on the map at a constant distance corresponding to actual road distances (col. 2, lines 13-30) from the center equal to those on the map. When the map is displayed on the display device, the circles are displayed on the basis of the circle's display data processed by the microcomputer (display control unit) being superimposed on the map displayed on the display device. See Fig. 3 and col. 4, lines 12-28. Also, see col. 3, lines 39-51, which describe how the display control unit (microcomputer) reads (processes) and superimposes the scale indication pattern on the road map screen in accordance with the position of the vehicle. Thus, the circles are processed such that they are centered around the position of the vehicle.

8. Yoshida does not explicitly teach displaying the map in a perspective view as cited in the claims. De Jong, however, teaches a method geared toward vehicle

navigation that displays part of a map in a perspective view. See col. 1, lines 40-46. It would have been obvious to one of ordinary skill in the art with the teachings of Yoshida and De Jong before him to modify the vehicle-mounted navigation apparatus of Yoshida to display the map in a perspective view, because as De Jong teaches, a perspective view provides the user with more information about the terrain or area in which he moves or is interested in.

9. While the original distance from the center of the circle or arc of equidistant curve in Yoshida is displayed in plane view, it is not explicitly clear that the distance in the perspective view map of Yoshida and De Jong is displayed in plane view. However, text is usually shown in a plane view, even when a map is shown in a perspective view, because it is hard to read text in a perspective view. This teaching is supported by Watanabe, which shows text in a plane view within a perspective view map. See Figs. 11B, 12E, and 27. This shows a plane for the perspective view (items closer to the **DISPLAY REFERENCE POINT** appearing larger and items closer to the **DESTINATION** appearing smaller) where the text in the figure appears to remain a constant size (see Watanabe column 21, lines 22-43 and figure 19 and 27). If the textual elements were on the same plane as the perspective view, the textual elements further off in the distance (closer to the **DESTINATION** and further from the **DISPLAY REFERENCE POINT**) would be shown in smaller fonts (see Watanabe column 21, lines 22-43 and figure 19 and 27). It would have been obvious to one of ordinary skill in the art to display the textual distance of Yoshida and De Jong in a plane view as shown in Watanabe, because plane view text is easier to read than perspective view text.

10. Yoshida teaches that the display control unit (microcomputer) processes data of a plurality of circles representing different geographical distances from the center and the circles are superimposed on the map displayed. See Fig. 3, which shows circles representing distances of 1, 2, and 3 km. Also, see col. 4, lines 12-28. De Jong teaches the perspective view as described above. Yoshida further shows that the display control unit (microcomputer) outputs numbers (1, 2, 3) indicating a geographical distance from the center to the circle and displays each of the numbers in close proximity to the circumference of the circle with the geographical distance thereof indicated by the number. See Fig. 3. Yoshida still further teaches that the display control unit (microcomputer) changes contraction of a map displayed on the display device and modifies the geographical distances from the center to the circles and the number of circles in accordance with a degree of contraction of the map. See the Reduce (20) and Magnify (21) buttons in Fig. 3 and col. 4, lines 4-12, which describe how the reduction of scale is handled. For example, if the Magnify button is pressed to magnify the map by a factor of 2, then only the circles representing 1 and 2Km will be displayed (2 circles instead of 4). Also, see col. 5, lines 4-30, which describe changing the scale and scale indication patterns (i.e. geographical distance representations). The perspective view is taught be De Jong, as described above.

11. Yoshida, De Jong, and Watanabe fail to explicitly disclose that the microcomputer changes the color of a distance display arc to a supplementary color of a drawn portion. The examiner submits, however, that merely assigning a particular color to an object rarely establishes novelty in an invention. Nonetheless, the examiner

points to Bomans, who teaches a navigational system in which a microcomputer changes the color of a displayed object to a supplemental color that "stands out clearly from the background of the screen". See col. 5, lines 10-14. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the color of a distance display arc to a supplementary color of a drawn portion as suggested by Bomans in combination with the teachings of Yoshida, De Jong, and Watanabe so that the arc stands out clearly from the background.

12. Referring to claims 6 and 13, the electronic map apparatus of Yoshida is a navigation apparatus mounted on a vehicle (Vehicle-Mounted Navigation Apparatus), and the specified point is the position of the vehicle. The map data includes the position of the vehicle, which is read from the media. See col. 1, lines 53-62 and col. 3, lines 39-51. The perspective view is taught be De Jong, as described above.

13. Referring to claims 7 and 14, Yoshida shows that the specified point is the current location of the vehicle, but does not explicitly show the specified point is a point on a map specified by a user as cited in the claims. However, De Jong teaches that a driver (user) can select a position by hand on the map. See col. 4, lines 45-46. It would have been obvious to one of ordinary skill in the art with the teachings of Yoshida and De Jong before him to modify the vehicle-mounted navigation apparatus of Yoshida, De Jong, Watanabe, and Bomans to allow the user to select the specified point, because as De Jong teaches in col. 3, lines 24-50, the user may wish to see his surroundings further down a route or look at route segments that have not been traveled.

14. Referring to claims 8 and 15, Yoshida teaches displaying a symbol representing a direction (the direction of the vehicle) at the specified point (vehicle location). See Yoshida at col. 3, lines 55-59. De Jong teaches the perspective view as described above.

15. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida, De Jong, Watanabe, Bomans, and U.S. Patent No. 6,012,014 to Koyanagi et al. (hereinafter Koyanagi).

16. Referring to claims 16-17, Yoshida describes using a plurality of circles to show the geographical distance of equidistant locations (i.e. a scale), and De Jong teaches displaying a map in a perspective view, but Yoshida, De Jong, Watanabe, and Bomans do not explicitly state that the circles or arcs are displayed so that the constant distance for each equidistant curve corresponding to actual road distance is changed in accordance with the perspective of the map being displayed on the display device in the perspective view.

17. However, Koyanagi describes an electronic map apparatus and method that displays grid lines or latitude and longitude lines to show a scale on a perspective view of a map to give the user a sense of distance. See col. 1, line 63 - col. 2, line 10. Koyanagi discloses the use of a bird's eye view (col. 2, line 9), as does De Jong (col. 2, line 4) to give the user a more realistic view of the map. Koyanagi describes that the bird's eye view is dependent on an angle of depression 'ϕ' (col. 4, lines 13-21 and col. 12, lines 54-61), and that the scale (latitude and longitude) is converted for the bird's

eye view. See col. 11, lines 34-43. The angle of depression varies the perspective of the map. It would have been obvious to one of ordinary skill in the art to modify the electronic map apparatus and method of Yoshida, De Jong, Watanabe, and Bomans to vary the scale (curves corresponding to actual road distances) of Yoshida in accordance with the angle of depression (perspective) for a bird's eye view as supported in Koyanagi displayed on the display device in the perspective view as supported by De Jong and Koyanagi in order to provide distance information for the perspective view as supported in Koyanagi (col. 2, line 8).

Response to Arguments

18. The arguments filed on 2-09-2006 have been fully considered but they are not persuasive. Reasons set forth below.

19. The applicants' argue that "Yoshida, De Jong, Watanabe, and Bomans fail to teach or suggest a microcomputer configured to selectively display perspective views and plane views on its display device such that in the perspective view an arc of equidistant curves is displayed dependent on the arc's display data being superimposed on the map display and in the plane view a corresponding distance from the center of the arc of equidistant curves is displayed on one of a plurality of arcs of equidistant curves."

20. In response, the examiner respectfully submits that Yoshida teaches a display control unit (microcomputer) processes the map data and scale indication patterns, which is an equidistant curve from a center at a specified point (location of the vehicle)

on the map and links points on the map at a constant distance corresponding to actual road distances (col. 2, lines 13-30) from the center equal to those on the map. When the map is displayed on the display device, the circles are displayed on the basis of the circle's display data processed by the microcomputer (display control unit) being superimposed on the map displayed on the display device. See Fig. 3 and col. 4, lines 12-28. Also, see col. 3, lines 39-51, which describe how the display control unit (microcomputer) reads (processes) and superimposes the scale indication pattern on the road map screen in accordance with the position of the vehicle. Thus, the circles are processed such that they are centered around the position of the vehicle.

21. De Jong, teaches a method geared toward vehicle navigation that displays part of a map in a perspective view. See col. 1, lines 40-46.

22. Watanabe teaches a similar car base navigation display, but further teaches a plane for the perspective view (items closer to the **DISPLAY REFERENCE POINT** appearing larger and items closer to the **DESTINATION** appearing smaller) where the text in the figure appears to remain a constant size (see Watanabe column 21, lines 22-43 and figure 19 and 27). If the textual elements were on the same plane as the perspective view, the textual elements further off in the distance (closer to the **DESTINATION** and further from the **DISPLAY REFERENCE POINT**) would be shown in smaller fonts (see Watanabe column 21, lines 22-43 and figure 19 and 27).

23. This problem was alleviated by the references by displaying textual data relating to map positions on a different plane, one that corresponds with the display screen and

can display all characters in a readable format and is superimposed over the perspective view.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

25. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis G. Bonshock whose telephone number is (571) 272-4047. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 4:00 p.m.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4-25-06
dgb

RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173